A New Phanerostethus from New Caledonia (Coleoptera: Curculionidae)

BY ELWOOD C. ZIMMERMAN
Bernice P. Bishop Museum

(Presented at the meeting of June 9, 1941)

Among the Rhynchophora collected by Dr. F. X. Williams in New Caledonia for the Hawaiian Sugar Planters' Association in 1940 are two examples of a new species of the cryptorhynchine genus *Phanerostethus* Marshall, 1931. This is the seventh species of the genus to be described, and New Caledonia marks the most western locality at which a species has been discovered.

The known members of the genus, arranged by date of description, are:

1. **Phanerostethus dilophus** Marshall, Insects of Samoa, part 4, fasc. 5, p. 286, fig. 12, 1931. Genotype.
   Samoa: Upolu.
2. **Phanerostethus ingens** Zimmerman, Bishop Mus. Occasional Papers, *12*(23): 43, figs. 2, *f*; 3, *b*, 1936.
   Society Islands: Raiatea.

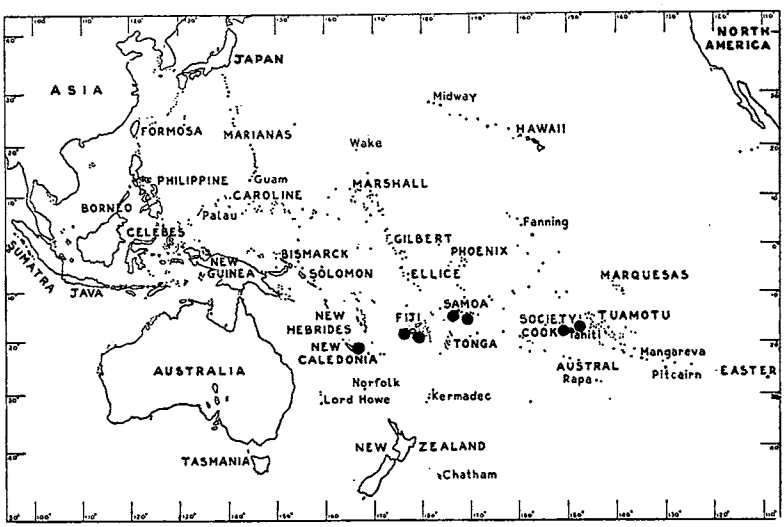

Fig. 1.—Map showing the distribution of the described species of *Phanerostethus*.

3. **Phanerostethus pallidiceps** Zimmerman, Bishop Mus. Occasional Papers, *12*(23) : 44, fig. 3, *c*, 1936.
   Society Islands: Tahiti.

4. **Phanerostethus vitiensis** Zimmerman, Bishop Mus. Occasional Papers, *14*(17) : 318, fig. 1, *a, b*, 1939.
   Fiji: Viti Levu, Taveuni, Ovalau, Matuka, Moala, Tuvutha.

5. **Phanerostethus fasciculatus** Zimmerman, Bishop Mus. Occasional Papers, *14*(17) : 319, fig. 1, *c, d*, 1939.
   Fiji: Described from Tuvutha, but now known to be widespread in Fiji.

6. **Phanerostethus maculosus** Zimmerman, Bishop Mus. Occasional Papers, *16*(7) : 169, fig. 1, *a, e*, 1941.
   Samoa: Tutuila.

7. **Phanerostethus niger** Zimmerman, new species.
   New Caledonia.

The known geographical distribution of the genus is indicated on the accompanying map (fig. 1).

Phanerostethus niger, new species (fig. 2).

Female. Derm reddish brown, piceous to black; scaling dense and appressed, predominantly black above; scales on the base of the rostrum mostly white, those on the head almost all black; pronotum entirely with black scales except for a small, elongate, basal patch of brownish yellow scales in front of the scutellum and a few pale scales near the outer corners of the basal margin; elytra with mottled darker and paler black scaling, the darker patches velvety black, the paler ground areas more iridescent, with a conspicuous patch of pure white scales on intervals 7 and 8 above the suture between the first and second ventrites, this followed by a larger conspicuous patch of brownish yellow scales across intervals 4, 5 and 6 in echelon, and with small, irregular, scattered patches of similarly colored scales on the declivity; legs with the femora with black scaling and with the scaling on their basal fourths or thirds white, the remainder flecked with white squamiform setae; tibiae black in the basal half, white in the distal half or more, the setae among the black scales black, among the white scales white; undersurface with predominantly white or grey scales.

Head with the puncturation hidden by the dense scaling which is flat and appressed and not arranged like honey-comb; the interocular area depressed, with scattered, slanting, round-tipped, lanceolate setae, those along the inner margins of the eyes largest. *Rostrum* with the squamae confined to the sides behind the antennae; derm shiny, finely punctate; the extreme distal breadth equal to the breadth of the interocular area and that two-tenths broader than the breadth at the antennae. *Antennae* with the scape distinctly clavate, as long as the first four funicular segments; funicular segment 1 stout, twice as long as broad, about as long as 2 plus 3, almost twice as broad as 2; segment 2 not quite as long as 3 plus half of 4; segments 3 and 4 subequal in length; segments 5 to 7 successively broader; club about

as long as the preceding five segments. *Prothorax* slightly transverse (42 to 38 on the holotype), broadest at about the basal third, arcuate on the sides to the broad subapical constriction at the apical third; the constriction continued broadly, and shallowly across the dorsum and not conspicuously impressed; base slanting slightly upward above the base of the elytra, the highest point reached within the basal fourth and there only slightly higher than the highest elevation of the elytra; puncturation entirely concealed by the dense squamae; the scales shallowly concave and in some lights giving a slight honeycomb-like appearance, especially on the sides; with numerous, stout, erect, mostly black, conspicuous, spatulate setae scattered over all. *Elytra* sinuous at the base, five-sevenths as broad as long, twice as long as the prothorax, measured from the side, arcuate on the sides; without subapical calli; striae narrow but well defined, their punctures small, the tenth striae extending to above the hind coxae, striae 7 and 8 not reaching the base; intervals plain, slightly convex, the first intervals distinctly narrowed in the basal third and only one-half as broad as a second interval in the basal fourth, each interval with a row of long, erect, narrowly spatulate or peg-like conspicuous setae. *Legs* with numerous squamiform or peg-like setae, those on the tibiae more erect. *Sternum* with the pectoral canal squamose in the prosternal and mesosternal parts but bare between the fore coxae; mesosternal receptacle with well-developed, high side walls, the receptacle terminating just behind the middle of the mesocoxae in the female; metasternum densely punctate, squamose, flattened transversely. *Venter* densely squamose, the scales appressed; the squamiform setae scattered on

Fig. 2.—*Phanerostethus niger,* new species, holotype female. Photographs by W. Twigg-Smith.

the first, second and fifth ventrites, in a single row across the third and fourth ventrites; first ventrite convex, as long as ventrites 2, 3, and 4 combined. Length: 2.7 mm.; breadth: 1.25 mm.

New Caledonia. Holotype female collected from a broad leaved *Acacia* near the sea shore at Noumea, August 19, and one female paratype collected from *Acacia laurifolia,* at Noumea, September 6, 1940, by F. X. Williams.

The only other species of the six previously described species that has predominantly black scaling is *Phanerostethus vitiensis* Zimmerman. That species is, however, obviously distinct from this one because of numerous structural characters. The new species has the longitudinal dorsal contours of the pronotum and elytra less discontinuous than any of the other described species.

A series of specimens may show variation in the arrangement and extent of the maculae on the elytra. On the two specimens before me, these maculae are distinct to the unaided eyes. The paratype is not as clean and fresh as is the holotype.

Dr. Williams has kindly given me permission to store the holotype in the type collection of Bishop Museum.

A New Scydmaenid from Hawaii (Coleoptera)

BY ELWOOD C. ZIMMERMAN
Bernice P. Bishop Museum

(Presented at the meeting of June 9, 1941)

The first data concerning the family Scydmaenidae in the Hawaiian islands were recorded by Van Zwaluwenburg, Proc. Haw. Ent. Soc. *8*(1) : 24, 1932. The family is not known to be represented in the endemic fauna of Hawaii. The species recorded by Van Zwaluwenburg, although we consider it adventitious, has apparently never been described. In 1932, some specimens collected by Van Zwaluwenburg were sent to the United States National Museum for identification; these specimens were subsequently forwarded to Dr. Ctibor Blattny, Prague, Czechoslovakia. Dr. Blattny apparently intended to describe the species as new, because specimens were returned under the manuscript name *"Cephennodes hawaiicus* Blattny". However, we have been unable to find any record of the description of the species or a reference to such a description.

It is desirable to have a name for the Hawaiian species, and Mr. Van Zwaluwenburg has asked me to draw up a description. I have done this with some diffidence, however, because I am not familiar with the taxonomy of the family. Mr. L. L. Buchanan has written to Mr. Van Zwaluwenburg, "If you wish to publish on this species,

I suppose it will be necessary first to prepare and publish a description disregarding Dr. Blattny's apparent intention to do this". In view of the present world conflict and the opinion of entomologists here and at the National Museum, I present the description of the scydmaenid which has remained in our collections without a proper name.

I have dedicated the species to Mr. Van Zwaluwenburg, because he is the one responsible for the discovery of this interesting insect and for continued effort in obtaining a name for it.

Because of the finely margined lateral edges of the prothorax, I follow Dr. Blattny in placing the new species in *Cephennodes* rather than in *Cephennium*. *Cephennodes* has been considered by some authors to be a subgenus of *Cephennium*.

Cephennodes zwaluwenburgi, new species (figs. 1, 2).

"Cephennium sp.", Van Zwaluwenburg, Proc. Haw. Ent. Soc. *8*(1) : 24, 1932.

Cephennodes hawaiicus Blattny, ms. name, in litt., not published with a description; note by Van Zwaluwenburg in Proc. Haw. Ent. Soc. *8*(2) : 229, 1933.

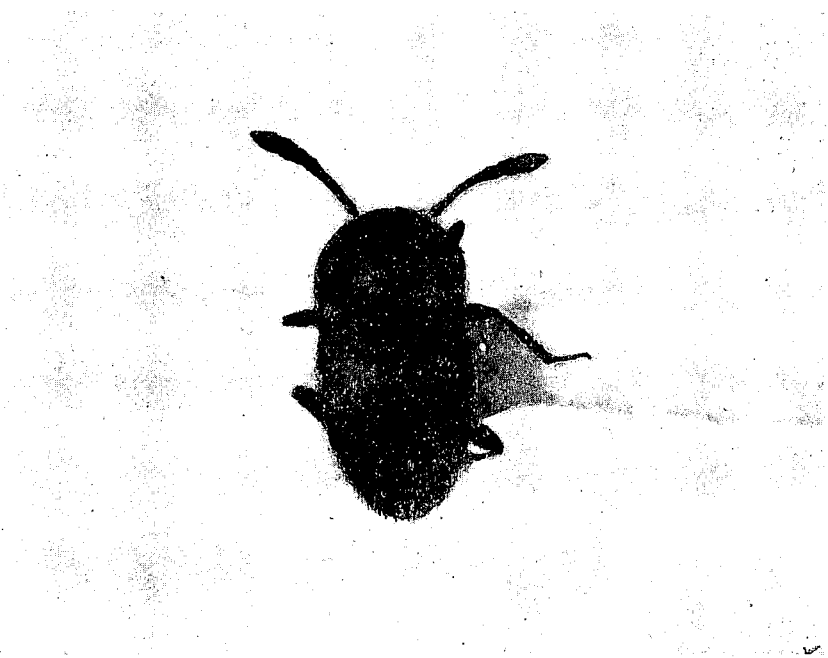

Fig. 1. *Cephennodes zwaluwenburgi,* new species. Photograph by Twigg-Smith. × 50

Derm shiny reddish brown, appendages, especially the legs, usually more yellowish brown, vestiture dense, long, conspicuous, golden in color.

Head minutely, inconspicuously punctate; the interscrobal suture separating the clypeus from the front feeble and inconspicuous or obsolete; the shortest distance across the front between the inner margins of the antennal scrobes one-half that between the inner margins of the eyes; the greatest distance between the outer edges of the eyes one-fourth greater than the median length of the head from a line drawn between the dorsal edges of the eyes and the apex of the closed mandibles; eyes one-third higher than long, ovate, hirsute. *Antennae* slightly longer than the greatest pronotal breadth, rather densely hirsute, the hairs on the first nine segments longer than the segments; segment 1 truncate-conical; segment 2 about as long as 3 plus 4, almost twice as long as broad, cylindrical; segments 3-6 inclusive each about as broad as long, subcylindrical; 7 about one-third longer than 6, twice as long as broad, slightly longer than 8; 8 about one-third broader than long; club distinctly three segmented; segment 9 transverse, three-fourths as long as 10; 10 one-third broader than long; 11 twice as long as 10, slightly longer than broad, pointed, the sides arcuate (the segments of the club measured on their broad sides). *Prothorax* shaped as illustrated, transverse, (breadth 32, length 24, measured from above), the median longitudinal dorsal contour evenly convex; posterior margin bisinuate, postero-lateral corners acute; minutely punctate, the punctures bearing long, curved, posteriorly directed hairs; the fovea near each hind angle conspicuous. *Elytra* about four-fifths as broad as long, slightly more than twice as long as the pronotum as measured from the side; sculpture and vestiture similar to that of the pronotum, the hairs long, curved, inclined; longitudinal dorsal contour rather evenly arcuate, discontinuous with that of the pronotum; each elytron with a large, conspicuous impression at the base between about the middle and the suture

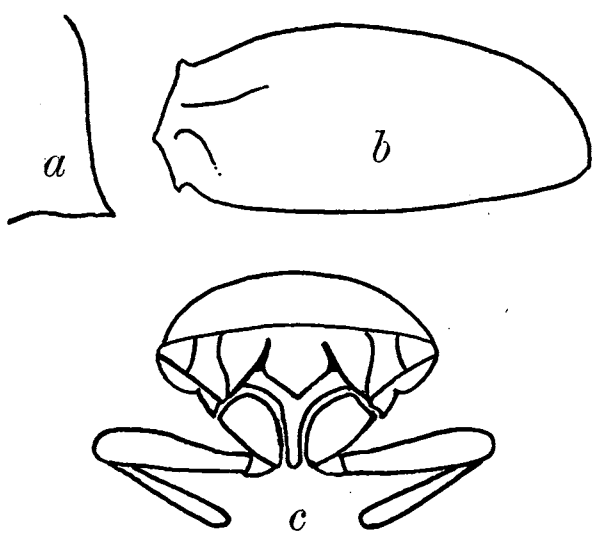

Fig. 2. Diagrams of details of *Cephennodes zwaluwenburgi*, new species. *a*, posterior corner of pronotum; *b*, elytron; *c*, view of prothorax removed from body, caudal aspect. Diagrams from camera lucida outlines from balsam mounts.

and which contains a small fascicle near the basal margin. *Wings* fully developed. *Legs* slender, hind femora about as long as the hind tibiae; hind tibiae slenderly clavate, nine times as long as the greatest breadth, about one-third longer than the hind tarsi, without any distinct apical spurs; mid and hind tarsi with the segments more elongate than those of the fore tarsi, the first segment of a hind tarsus about one-third longer than the greatest breadth of a hind tibia. *Sternum* with the intercoxal process of the prosternum produced into a thin lamella that extends fully to the lowest level of the coxae; the fore coxae with their outer sides forming a straight line and in line with the pro-thoracic pleurae, their lengths four-tenths longer than their breadths, one-half as long as a fore femora and trochanter combined, the prosternal area before and behind the coxae very narrow; intercoxal process of the mesosternum somewhat similarly developed as that of the prosternum, but at least twice as broad; metasternum, measured along the side, two-thirds as long as broad, broadly, deeply and conspicuously impressed in the basal third to the mesocoxae, the punctures small but distinct and bearing long slanting hairs similar to those on the elytra, the intercoxal process as broad at its apex as the length of the first ventrite, evidently truncate, but appearing emarginate. *Venter* with the long hairs slanting away from the derm at an angle of about 45 degrees, the first five ventrites subequal in length along the median line; the fifth segment about one-fourth shorter than the first; ventrite six as long as five plus about one-half of four. Length: 0.8 mm.; breadth, 0.45 mm.

Hawaii: Island of Oahu. Holotype collected by me at light in Makiki, Honolulu, May 4, 1937, in Bishop Museum; two paratypes collected by flotation from soil from Mt. Tantalus, August 1930, by Van Zwaluwenburg [one of the specimens bears a label "*Cephennium* sp. not in B(ritish) M(useum)" and was determined by G. E. Bryant]; one dissected specimen with its head missing and mounted in balsam on a slide from sugar cane soil from Honolulu, 1931, collected by Van Zwaluwenburg, and an additional specimen with the same data from the United States National Museum. The latter is an immature, pale, straw colored example. As a designated paratype it will be returned to the National Museum. It bears the labels "*Cephennodes hawaiicus* m. Blattny det.", "2 specimens sent to Blattny for determination March 1932" and "Returned by Blattny, paratype (?)".

This minute addition to the Hawaiian coleopterous fauna can be easily recognized. In appearance it resembles a miniature member of the Eucnemidae or Elateridae. It appears to me that the species is almost certainly an introduced form. It is not possible for me to say whence it came, however, the Scydmaenidae of Oceania are unknown—probably not more than a half dozen species have been described from that area.